

BPI Standards and Certifications Update

NASCSP 2025 Winter Training Conference

February 5, 2025



About the Presenter

- Mr. Powell has over 30 years of experience as a building scientist, project manager, energy efficiency consultant and educator with clients ranging from undergraduate students to federal government.
- His experience includes research, instruction, data analysis, technical and project management for a wide variety of projects related to building performance, code compliance, standards development, and sustainability.
- Previously technical lead at Redhorse Corporation supporting the U.S. Department of Energy, Residential Buildings Integration division, leading the team supporting the Home Performance with ENERGY STAR (HPwES) program, Home Energy Score program, and pilot efforts to utilize remote technologies for home assessments and quality assurance.
- Mr. Powell holds a wide variety of professional certifications including BPI Building Analyst, LEED Accredited Professional, and Home Energy Rater.
- In his spare time, Mr. Powell enjoys photography, bicycling, and being trained by his rescue dog Gifford.





**What is the latest with
BPI Certifications and
Certificates?**



BPI Certification Field Exam Proctoring

- Effective June 1, 2023 - BPI proctors are now able to train and proctor BPI exams for the same candidate, **EXCEPT for the Energy Auditor certification.**
- All proctored exams must be recorded and held for six months by the Test Center.



BPI Certification Remote Exam Process

- BPI implemented remote exam process in March 2020.
- BPI certification exams can be proctored remotely, **EXCEPT Energy Auditor certification.**
- All remote exam recordings must be submitted to BPI within 5 business days.
- BPI continues to make improvements to this process.



Updates to Building Analyst and Envelope Professional

- BA and Envelope were replaced on May 31, 2023.
- Building Analyst Professional (BA-P) exam updated.
- Creation of new credential, Building Analyst Technician (BA-T), specific to diagnostic testing and data collection.

Use the QR Code to access FAQs and more information on these changes.



Building Analyst Technician (BA-T)



A Building Analyst Technician conducts residential building science-based diagnostic tests and home performance data collection.

Building Analyst Technician (BA-T)

- Introduced in 2023 along with Building Analyst Professional (BA-P) to replace legacy Building Analyst and Envelope certifications.
- Pre-requisite Building Science Principles (BSP).
- Does not include work scope development or energy modeling.
- Field exam only with oral questions.
- Proctor resources available with rubric, images, etc.

**Use the QR Code to Visit the BA-T
Certification Page.**



Building Analyst Technician (BA-T)

Updates based on proctor and test center feedback

- Reordered field guide to group together oral questions with images.
- One oral question made a little more challenging.
- Improved rubric to provide clearer proctor guidance for scoring.
- Updated documents available February 1.



Building Analyst Technician (BA-T)

Did you know simulation is allowed for certain tasks on the BA-T exam?

- See details on the rubric.
- Additional simulations and workarounds may be possible but must be pre-approved prior to the exam session.
- Note: Simulation and workarounds are NOT allowed on the Energy Auditor (EA) field exam.



Please reach out to the BPI Tech team if you have questions.



Building Analyst Professional (BA-P)



A Building Analyst Professional is a certified Building Analyst Technician who also conducts energy modeling, building analysis, and data evaluation in order to provide a comprehensive report with a list of prioritized home performance recommendations.

Building Analyst Professional (BA-P)

- Introduced in 2023 along with Building Analyst Technician (BA-T) to replace legacy Building Analyst and Envelope certifications.
- No experience requirement.
- Pre-requisite Building Analyst Technician (BA-T).
- Written exam only.
- Exam focuses on analyzing data, energy modeling and work scope development.

**Use the QR Code to Visit the BA-P
Certification Page.**



Building Analyst Technician (BA-P)

Updates based on proctor and test center feedback

- Replaced one question that was not fully supported by reference standard.
- Improved distractors for several questions.
- No changes to KSAs.
- Updates will be implemented February 1.



Department of Energy (DOE) Energy Skilled

Did you know that the Energy Auditor (EA) and BA-P are Energy Skilled Recognized Certifications?

- Energy Skilled recognized certifications are credentials that taxpayers can use to claim the Energy Efficient Home Improvement Credit (Section 25C).
- More information here: <https://www.bpi.org/blog/2023-09-18/building-analyst-professional-recognized-by-doe-for-25c-tax-credit/>



EA-QCI

Energy
now

open

- Pilot expected
- Expected to last 2
- Candidates must meet pre



REPLAY

Missed our EA-QCI webinar?
Access the recording on the
BPI website!



How Updates Apply

Access on the BPI website:

Moratorium on Public Information

Energy Auditor
Pilot Exam
Application

- [Application for Energy Auditor Pilot Exam](#)
- [Application for Quality Control Inspector Pilot Exam](#)



Total Building Performance Certificate of Knowledge



The certificate of knowledge covers deep energy retrofits that achieve household energy reductions of at least 50% by addressing all major energy loads.

- TBP also addresses on-site power generation and electrical/thermal storage and prepares the electrical system to support electric vehicles.

Total Building Performance Certificate of Knowledge

- National rollout launched May 1, 2024.
- Free study modules from NEEP.
- Discounted exam (\$100) through March 31, 2025.



1. Designing a Building Project



2. Financial Analysis



3. Communication to Clients



4. Energy Modeling, Load Calculations, and Measure Analysis



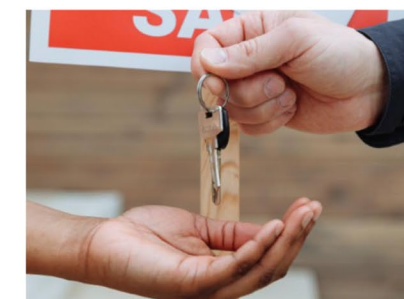
5. Building Science and Whole-Building Concepts



6. Greenhouse Gas Emission Impacts of a Project



7. Electrification Technologies



8. Understanding the Post-Retrofit Process



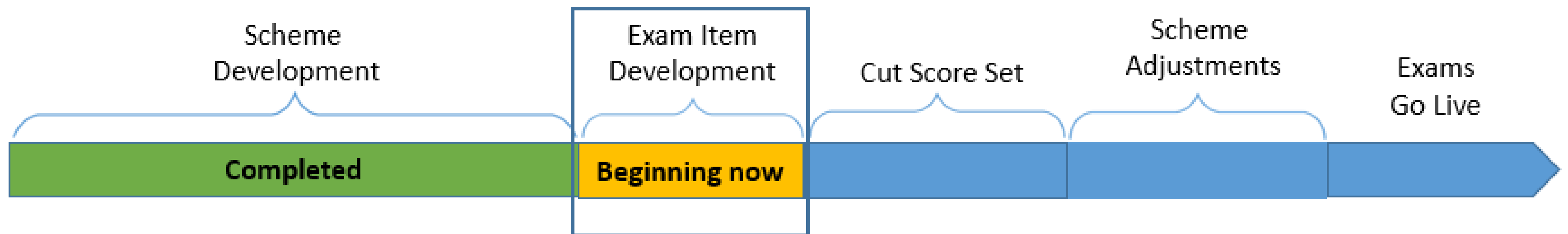
Multifamily Building Analyst Certification Update

- Upgraded the Job Task Analysis (JTA) and Knowledge, Skills, and Abilities (KSAs).
- Aligned JTA and KSAs with NREL Multifamily Energy Auditor Job Task Analysis and Report.
- BPI Multifamily Standards Technical Committee (M-STC) reviewed/updated to current protocols and requirements.
- Accepting applications for Multifamily Standards Technical Committee members.

**NREL MF Energy Auditor JTA can be found here:
[nrel.gov/docs/fy14osti/60447.pdf](https://www.nrel.gov/docs/fy14osti/60447.pdf)**



Multi Family Building Analyst Professional Certification Development Process



Credentials on the Horizon

Residential Electrification Energy Audit Professional (REEAP) Certificate of Knowledge



Focus on energy efficiency opportunities as a means of load/demand reduction as well as reduced energy consumption and to ready the structure for heat pump installation and other electrification opportunities.

- Based on Guiding Principles for Conducting Electrification Energy Audits on 1-4 Family Dwellings



Credentials on the Horizon

Heat Pump Water Heater Site Consideration, Sizing, Equipment Selection, and Commissioning (HPWH) Certificate of Knowledge



Addresses the proper site considerations, sizing and equipment selection, and commissioning of HPWH

- Site Considerations
- Sizing and Equipment Selection
- Commissioning



**What is the latest
with BPI Standards?**



Standard Practice for Basic Analysis of Buildings



This standard practice defines the minimum criteria and specific procedures for conducting building science-based residential energy audits and related diagnostic tests.

Standard Practice for Basic Analysis of Buildings

Status and Updates

- Definitions and acronyms migrating to BPI glossary.
- *Residential Electrification Energy Audit Protocol (REEAP)* to be included as an informative annex.
- Will be released for public review in 2025.



Technical Standards for the Multifamily Building Analyst Professional



This Multifamily Energy Auditing Standard defines the minimum criteria for conducting a building-science-based evaluation of existing multifamily buildings and outlines specific technical procedures associated with the evaluation.

Technical Standards for the Multifamily Building Analyst Professional

Status and Updates

- Addresses challenges resulting from control and energy consumption split between building owner and tenants for HVAC, lighting, and appliances.
- Aligns with the definition of a Level II audit as defined by ASHRAE.
- COVID impacted its development, priority, and release.
- Committee reconvened in 2024; addressing public review comments.



Standard for Home Performance-Related Data Transfer



Facilitates communication and the exchange of information and data among all actors in the home performance industry by providing an extensible mark-up language (XML) standard for transferring information related to whole-house energy efficiency upgrades.

Standard for Home Performance-Related Data Transfer

Status and Updates

- Provides requirements for an XML standard data transfer protocol.
- Establishes a common dictionary for terms and characteristics of homes necessary for the characterization of building elements, performance modeling, and improvement scope development.
- Version 4.0 (Major Update) released in 2024.
- Version 4.1 (Minor Update) projected for 2025 release; out for public review
- Update cycle every 6 months to synch up with NREL OpenStudio.



Standard Practice for Standardized Qualification of Whole-House Energy Savings Predictions by Calibration to Energy Use History



This standard specifies a process to calibrate the model to the actual energy use of the home, using an approved building energy simulation software tool and actual energy bills. It provides a set of criteria to be used in the final calculation of standardized estimated savings that may be considered in compliance with this standard.

Standard Practice for Standardized Qualification of Whole-House Energy Savings Predictions by Calibration to Energy Use History

Status and Updates

- BPI 2400 is referenced in the HOMES Energy Efficiency Rebate Program, part of the Inflation Reduction Act of 2022 (IRA).
- The main body was not altered, but Annex E of the standard was adjusted to meet industry needs related to the IRA.
- The 2024 addition of Annex E provides an alternative pathway to compliance when good data is not available.
- New BPI-2400 Work Group established in 2025 to review the main body of the standard.



Coming Soon

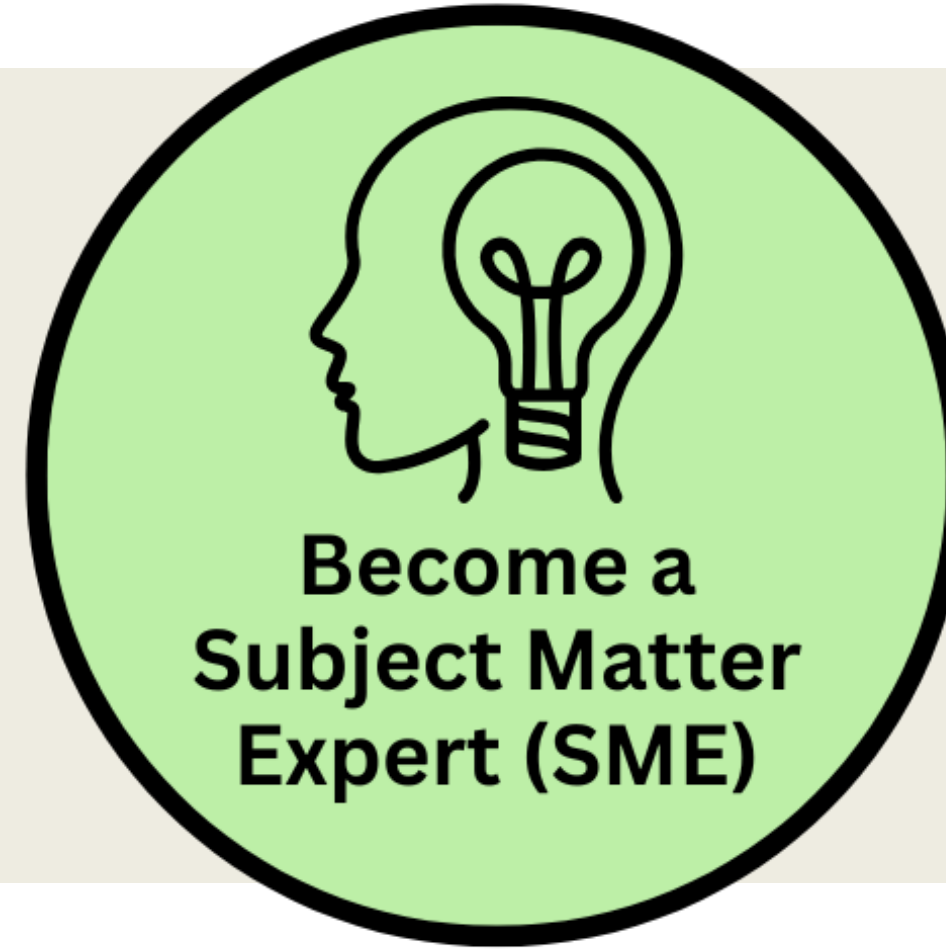
Technical Standards for the Manufactured Housing Professional

- The latest version of the standard is from May 2003. Manufactured housing has changed significantly since that time.
- Purpose: Verify performance of manufactured housing systems and their interactions.
- Certification planned to follow.



Get Involved

Earn CEUs while helping to shape the future of the industry!



Learn more and apply today at BPI.org



Questions?

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